

ATTORNEY'S DOCKET NUMBER: 2001180-0051 (HU 1588-98)

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Shair et al.

Serial Number:

10/091,240

Filed: For:

March 5, 2002

SYSTEM FOR DETECTING REPORTER GENE EXPRESSION

Mail Stop: DD

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

### TRANSMITTAL LETTER

Enclosed are the following documents:

- 1. Form PTO-1449 (4 pages);
- 2. Information Disclosure Statement (6 pages);
- 3. Cited Art (45); and
- 4. Return Postcard

If any additional fees are required to be paid or if any overpayment has been made, please charge same to Deposit Account No. 03-1721.

Respectfully submitted,

C. Hunter Baker, M.D., Ph.D.

Registration Number: 46,533

Choate, Hall & Stewart Exchange Place 53 State Street Boston, MA 02109 (617) 248-5000 Dated: (a) 21/07

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Certificate of Mailing

Examiner: Tran, M. &

Art Unit: 1639

I certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as First Class Mail in an envelope addressed to Assistant Commissioner for Palents, Washington, DC 20231.

6-24-03 Landra Larcocia

Date

Signature

Sandra Saccocia

Typed or Printed Name of person signing certificate

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Title:

SYSTEM FOR DETECTING REPORTER GENE EXPRESSION

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#### **STATEMENT**

Pursuant to the duty of disclosure under 37 C.F.R. §§1.56, 1.97 and 1.98, Applicant requests consideration of this Information Disclosure Statement.

# Type of Statement

The present Information Disclosure Statement is:

- [X] An original Information Disclosure Statement; or
- [ ] A supplemental Information Disclosure Statement.

#### Certificate of Mailing

I certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as First Class Mail in an envelope addressed to Assistant Commissioner for Palents, Washington, DC 20231.

6124163

Date

Signature

Sandra Saccocia

Typed or Printed Name of person signing certificate

# Compliance with 37 CFR § 1.97

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The present Information Disclosure Statement is being filed:

<b>[X</b> ]	Pursuant to 37 CFR § 1.97(b); no fee or certification is required:					
	[]	Within	n three months of the filing date of a national application other than			
		a cont	inued prosecution application under § 1.53(d);			
	[]	Within	n three months of the date of entry of the national stage as set forth			
		in <b>§ 1</b> .	491 in an international application;			
	[X]	Before the mailing of a first Office action on the merits; or				
	[ ] Before the mailing of a first Office action after the filing of a request					
		contin	ued examination under § 1.114.			
[]	Pursuant to 37 CFR § 1.97(c) after the dates listed above but before the mailing					
	date of any of a final action under § 1.113, a notice of allowance under § 1.311, or					
	an action that otherwise closes prosecution in the application; Applicant hereby					
	either	:	,			
	[]	Certifies that either:				
		[]	each item of information contained in the information disclosure			
			statement was first cited in any communication from a foreign			
			patent office in a counterpart foreign application not more than			
			three months prior to the filing of the information disclosure			
			statement; or			
		[]	That no item of information contained in the information			
			disclosure statement was cited in a communication from a foreign			
			patent office in a counterpart foreign application, and, to the			

knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in § 1.56(c) more than three months prior to the filing of the information disclosure statement.; or

[ ] Includes herewith the fee set forth in § 1.17(p).

Pursuant to 37 CFR § 1.97(d), after the mailing date of any final action under § 1.113, a notice of allowance under § 1.311, or an action that otherwise closes prosecution in the application; Applicant hereby both:

[ ] Certifies that either:

Y

- each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement; or
- That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in § 1.56(c) more than three months prior to the filing of the information disclosure statement.; and

	]	Includes	herewith	the fee	set	forth in	n §	1.17(p).
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## Content of the Information Disclosure Statement

1

Applicant hereby makes of record in the above-identified application the reference(s) listed on the attached form PTO-1449 (modified). The order of presentation of the references should not be construed as an indication of the importance of the references.

Applicant includes copies of references as indicated below:

- [X] A copy of each cited reference not indicated with an asterisk is included;
- Copies of references indicated with an asterisk on the attached form PTO-1449 are not included pursuant to 37 CFR § 1.98(d) because they were previously provided to the United States Patent Office in an Information Disclosure Statement that complies with 37 CFR § 1.98(a)-(c) and was submitted in the following patent application that is relied upon in the present case for an earlier effective filing date under 35 USC § 120:

Serial Number	Filing Date	Status
		,

[ ] Copies of English translations of one or more non-English references are included.

Applicant hereby makes the following additional information of record in the aboveidentified application:

Applicant certifies that the Information Disclosure Statement either:

- [ ] Does not contain non-English language citations;
- [ ] Does contain non-English language citations, of which the following is a concise

explanation:

[ ] Includes one or more translations of a non-English citation.

#### Remarks

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The submission of this Information Disclosure Statement should not be construed as a representation that a search has been made.

The submission of this Information Disclosure Statement shall not be construed to be an admission that the information cited in the statement is, or is considered to be, material to patentability as defined in § 1.56(b).

The submission of this Information Disclosure Statement shall not be construed as a representation that the information cited in the Statement is, or is considered to be, in fact, prior art as defined by 35 U.S.C. §102.

It is respectfully requested that:

- 1. The Examiner consider completely the cited information, along with any other information, in reaching a determination concerning the patentability of the present claims;
- 2. The enclosed form PTO-1449 be signed by the Examiner to evidence that the cited patent(s) and publication(s) has (have) been fully considered by the Patent and Trademark Office during the examination of this application; and
- 3. The citations for the patent(s) and publication(s) be printed on any patent which issues from this application.

Notwithstanding any statements by Applicants, the Examiner is urged to form his or her own conclusions regarding the relevance of the cited reference(s).

Respectfully submitted,

C. Hunter Baker, M.D., Ph.D.

Registration Number: 46,533

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Dated: 6/24/a3

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Form PTO-144 (REV 8 83)		artment of Commerce d Trademark Office	Atty. Docket: 2001180-0051	In re Ap 10/091,2	plication No. 240			
10 mg	PPLESSENTAL INFO	RMATION	Applicant: Shair et a	ıl.				
JUN 7 SEA	DISCLOSURE STAT	EMENT	Filing Date: March 5, 2002	Group: 1639				
U. S. PATENT	DOCUMENTS							
Examiner's Initials	U.S. Patent No.	Applicant	Issue Date	Class	Subclass			
	5,780,258	de la Brousse et al.	July 14, 1998	435	29			
	5,702,903	Kinzler et al.	December 30, 1997	435	6			
	5,625,123	Shiho et al.	April 29, 1997	800	2			
	5,571,688	Mekalanos et al.	November 5, 1996	435	29			
	5,569,588	Ashby et al.	October 29, 1996	435	6			
	5,525,490	Erickson et al.	June 11, 1996	435	29			
	5,474,929	Pelcher	December 12, 1995	435	240.4			
	5,436,131	Condra et al.	July 25, 1995	435	7.4			
U.S. PATENT	U.S. PATENT APPLICATIONS							
Examiner's Initials	Serial No. or Publication No.	Applicant	Filing Date					
FOREIGN PAT	TENT DOCUMENTS							
Examiner's Initials	Document No.	Country	Date	Translation				
				Yes	No			
Examiner's OTHER DOCUMENTS Initials (Including Author, Title, Date, Pertinent Pages, Etc.)								
•	Baltimore, et al., "Regulation of the NF-χ B/Rel Transcription Factor and IχB Inhibitor System", Curr. Opin. Biol. 5:477, 1993.							
j	Baumann, et al., "Rapid Identification of Phosphopeptide Ligands for SH2 Domains" <i>J. Biol. Chem.</i> 271: 16500-16505, 1996.							
1	Crane, et al., "The Structure of Nitric Oxide Synthase Oxygenase Domain and Inhibitor Complexes", Science, 278: 425-431, 1997.							
1	Czarnik, "Encoding Methods for Combinatorial Chemistry" Curr. Op. Chem. Biol., 1:60-66, 1997.							
1	Eberhardt, et al., "Molecular Mechanisms of Inducible Nitric Oxide Synthase Gene Expression by IL-1β and cAMP in Rat Mesangial Cells", <i>The Journal of Immunology</i> , <b>160</b> : 4961-4969,							

	AT CELL				
Form PTO-1449 (REV. 8-83)	U.S. Department of Commerces  Patent and Trademark Office	Atty. Docket: 2001180-0051	In re Application No		
	EMENTAL INFORMATION	Applicant: Shair e	Applicant: Shair et al.		
O NO TEST	CLOSURE STATEMENT	Filing Date: March 5, 2002	Group: 1639		
PATEMI & TRANSPORT 19	98.				
Ne	eldman, et al., "Small, Reactive, and Contain evertheless Emerging as a Biochemical of Mews, 26-38, 1993.				
1	uchtel, et al., "Organic Chemistry on Solid S 96.	Supports" Angew Chem.	Int. Ed. Engl. 35:17-42,		
	rka, et al., "General Method for Rapid Syntlept. Protein Res. 37: 487-493, 1991.	hesis of Multicomponen	t Peptide Mixtures" Int.		
	allop, et al., "Generation and Screening of ar brary" <i>Proc. Natl. Acad. Sci. USA</i> , <b>90</b> : 1070		ded Synthetic Peptide		
	Gibaldi, M., "What is Nitric Oxide and Why Are So Many People Studying it?", J. Clin. Pharmacol. 33: 488-496, 1993.				
Inc	Goldring, et al., "In Vivo Footprinting of the Mouse Inducible Nitric Oxide Synthase Gene: Inducible Protein Occupation of Numerous Sites Including Oct and NF-IL6", <i>Nucleic Acids Research</i> , <b>24</b> (9): 1682-1687, 1996.				
√ Go Co	Goldring, et al., "Transcriptional Inhibition of the Inducible Nitric Oxide Synthase Gene by Competitive Binding of NF-κB/REL Proteins", <i>Biochemical and Biophysical Research Communications</i> , <b>209</b> (1): 73-79, 1995.				
	risham, et al., "Effects of Aminosalicylates a ependent N-Nitrosation Reactions", Biochem				
	evel, et al., "Purification of the Inductible Mol. Chem., 266: 22789-22791, 1991.	urine Macrophage Nitri	c Oxide Synthase" J.		
Jaffrey, et al., "PIN: An Associated Protein Inhibitor of Neuronal Nitric Oxide Synth Science, 274: 774-777, 1996.					
Re 14	nssens, et al., "Cloning and Expression of a claxing Factor/Nitric Oxide Synthase", <i>The J</i> 522, 1992.	Journal of Biological Ch	hemistry, <b>267</b> (21): 14519		
	'Kojima, et al., "Detection and Imaging of Nitric Oxide with Novel Fluorescent Indicators: Diaminofluoresceins", Analytical Chemistry, 1-8.				
Flı	ojima, et al., "Development of a Fluorescent uorescein Chromophore" <i>Chem. Pharm. Bul</i>	<i>l.</i> , <b>46</b> : 373-375, 1998.	de Based on the		
' Ko	oshland, "The Molecule of the Year" Science	e, 258: 1861, 1992.			
	no, et a., "Oxidative Stress Increases Hepatoetivity", Biochemical and Biophysical Research	*	-		
Inc	wenstein, et al., "Macrophage Nitric Oxide duction by Interferon γ and Lipopolysacchar 93.	-	_		

Form PTO-1449 (REV. 8-83)	U.S. Department of Commerce Patent and Trademark Office	R 1600/2900   Atty. Docket:   2001180-0051	In re Application No. 10/091,240	
O E JOSU	PPLEMENTAL INFORMATION	Applicant: Shair et al.		
O 7 8 MIL OF	DISCLOSURE STATEMENT	Filing Date: March 5, 2002	Group: 1639	
PATEMY & TRADE	Martin, et al., "Role of Interferon Regulatory Fac J. Exp. Med. 180: 977-984, 1994.	tor 1 in Induction of N	itric Oxide Synthase",	
J	Michel, et al., "Perspective Series: Nitric Oxide a 100(9): 2146-2152, 1997.	nd Nitric Oxide Syntha	ases", J. Clin. Invest.,	
J	Nakatsubo, et al., "Direct Evidence of Nitric Oxid Cells Using New Fluorescence Indicators: Diami 1998.			
1	Nestler, et al., "A General Method for Molecular Libraries" J. Org. Chem. <b>59</b> : 4723-4726, 1994.	Tagging of Encoded C	ombinatorial Chemistr	
/	Nunokawa, et al., "Human Inducible Nitric Oxide Regulated by Nuclear Factor-κB Dependent Med Research Communications, 223: 347-352, 1996.	<del>-</del>	= "	
V	Nunokawa, et al., "Expression of Human Inducib Promoter and 3'-Regions", <i>Biochemical and Biop</i> 526, 1997.	-		
	Oguchi, et al., "Enhancement of Inducible-Type NO Synthase Gene Transcription by Protein Synthesis Inhibitors", Activation of an Intracellular Signal Transduction Pathway by Low Concentrations of Cycloheximide", FEBS Letters, 338: 326-330, 1994.			
(	Peng, et al., "Nitric Oxide Inhibits Macrophage-Cin Vascular Endothelial Cells", <i>The Journal of Bio</i> 1995.	olony Stimulating Fac		
J	Sari, et al., "Expression in Yeast and Purification Synthase. Evidence for Cysteine-194 As Iron Pro 1996.			
•	Smith, et al., "Simple Alkanethiol Groups for Ter Enzymes", <i>Biochemistry</i> , <b>14</b> : 766-771, 1975.	nporary Blocking of Su	ılfhydryl Groups of	
Thompson, et al., "Synthesis and Applications of Small Molecule Libraries" (555-600, 1996.				
٧	Tan, et al., "Stereoselective Synthesis of Over Tw Features Both Reminiscent of Natural Products an Assays", J. Am. Chem. Soc., 120:8565-8570, 1993	nd Compatible with Mi	_	
	Venema, et al., "Organization of the Bovine Gene Synthase", Biochimica et Biophysica Acta, 1218:	Encoding the Endothe	elial Nitric Oxide	
d	Weinberg, "The Retinoblastoma Protein and Cell	Cycle Control" Cell, 8	1:323-330, 1995.	
1	Wong, et al., "The Heat Shock Response Inhibits Expression by Blocking lκ-B Degradation and Na Biophysical Research Communications, 231: 257	F-к Nuclear Translocat		
J	Xie, et al., "Role of Transcription Factor NF-κB/I The Journal of Biological Chemistry, 269(7): 470		ric Oxide Synthase",	

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Form PTO-14490 S. Department of Commerce S. Department of Commerce Stent and Trademark Office	1600/2000 ket: 2001 180-005 1	In re Application No. 10/091,240
SUPPLIEMENTAL INFORMATION DISCLOSURE STATEMENT	Applicant: Shair et a	l.
DISCLOSURE STATEMENT	Filing Date: March 5, 2002	Group: 1639
EXAMINER	DATE CONSIDERI	ED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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